

ABSTRACT OF THE DISCLOSURE

5 The present invention provides a vacuum processing system for creating processed substrates having a domed lid on at least the transfer chamber. The lid may be provided either convex to the chamber, thus decreasing the volume of the chamber and the amount of microparticulate matter present in the chamber, or concave to the chamber. The invention also provides features to enhance the use of the domed lid, *e.g.*, structural features that decrease lifting of the edges of the lid upon introduction of a vacuum to the chamber.